Remarks

Applicant submits this Preliminary Amendment in response to the Notice of Omitted Items(s) in a Nonprovisional Application dated December 17, 2001, in which page 13 of the patent specification appears to have been omitted from the application. This application is a continuation-in-part of U.S. patent application Serial No. 09/747,907, filed December 22, 2000, which was incorporated by reference into the above-identified application.

The material added to paragraph 22 and the paragraphs 23 and 24 inserted by this preliminary amendment are primarily copies of material from pages 12 and 13 of application Serial No. 09/747,907, copies of which are attached hereto as Exhibit B. Since that application was incorporated by reference, material copied from it does not constitute new matter.

The material added to paragraph 22 is believed to be identical to the language in the parent application, page 12, lines 15-21.

The added paragraph 23 is believed to be identical to the language in the parent application, page 12 line 22 through page 13 line 3, except for the reference number "90" in the third line appearing after "battery pack". The specification clearly identifies the battery pack with the reference number 90, e.g. in the preceding paragraph 22 and in Figure 1.

The added paragraph 24 includes language from the parent application, page 13 lines 4-10. Paragraph 24 contains some additional language, all of which is supported by other parts of the specification and claims as filed.

The second sentence of paragraph 24 is "Flash memory 54 includes two partitions, labeled A and B in Figure 1 and also referred to as Flash A and Flash B, which are reserved for the binary code." The fact that memory 54 has partitions A and B is shown in Figure 1 and disclosed elsewhere in the specification at: paragraph 32, lines 3-4; paragraph 36, lines 3-7; and paragraph 38 , lines 2-6.

In the last two sentences of paragraph 24 has been added language to the effect that the ISH is manufactured with a basic binary file in Flash A and upon startup that binary file is read from Flash A into RAM for operation of the CPU 50. These facts are disclosed elsewhere in the specification at: paragraph 16, lines 5-7; paragraph 32, lines 3-4; paragraph 38, lines 2-3; and in Claims 7 and 16.

Since all material added by this preliminary amendment was actually present in the application by the incorporation by reference of the parent application or was present in other parts of the specification as filed, the Applicants submits that entry of this amendment is proper.

If there are any questions or comments, the Examiner is encouraged to telephone the undersigned at (972) 731-2288.

Respectfully submitted,

Date: 2-15-02

Albert C. Metrailer
Reg. No. 27,145
Conley, Rose & Tayon, P.C.
5700 Granite Parkway, Suite 330
Plano, Texas 75204
(972) 731-2288

ATTORNEY FOR APPLICANT

EXHIBIT A

Clean Version of Amendments

[0022] POTS interface 15, LAN interface 20, WAN interface 25, CPU 50, and ATM controller 55 are mounted on motherboard 80, which is a printed circuit board (also referred to as a logic board) that provides the various connections between ISH components as discussed above. The motherboard may include expansion slots to accept expansion cards such as an additional POTS card, an ATM-25 interface, a cable modem, etc. Motherboard 80 is connected to power supply 85 and battery pack 90, thereby providing power to the ISH components, the attached analog telephones, and the battery monitoring and charge circuitry. CPU 50 contains a power supply control module 83 connected to power supply 85 by connection 84. A preferred power supply is a universal-input (40-400Hz, 90-270V AC RMS) switch mode lead/acid battery float charger with a current-limited output of nominally 13.8 V, and provides charging current to battery pack 90 as represented by connection 86. A preferred battery is a 12 volt DC, 2.5A gel cell (lead-acid) battery, and preferably battery pack 90 comprises two such batteries housed within the ISH.

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[0023] The power supply is plugged into a standard electrical outlet 87 and serves as the primary power source for the ISH. In the event of a power failure to the electrical outlet, the ISH operates under backup power provided by its battery pack 90 and basic telephone services remain available to the customer for emergency calls.

[0024] The controllers illustrated as being part of the CPU 50 are actually software stored as configuration files in RAM and as binary code in flash memory 54. Flash memory 54 includes two partitions, labeled A and B in Figure 1 and also referred to as Flash A and Flash B, which are reserved for the binary code. At the time of manufacture of the ISH, its final

installation location and configuration are not known and therefore the required configuration files and binary code cannot be known. Instead, the ISH is manufactured with a basic binary code stored in Flash A 54 to perform an automatic downloading of configuration files and binary code according to the steps illustrated in Figure 2. Upon initial startup of the system, that original binary code is read from Flash A 54 into RAM for operation of CPU 50.

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[0025] In Figure 2, the dotted line box 10 represents the ISH 10 of Figure 1, and more particularly the reboot steps which occur in ISH 10. The rebooting process also involves three servers which are external to the ISH and do not need to be located on the same premises as the ISH. One is a DHCP (Dynamic Host Configuration Protocol) server 92, which may be located in CO 30 (Figure 1). Another is a domain name server, DNS, 94, which may be located essentially anywhere, so long as it is accessible over a network, preferably the Internet. The third is a TFTP (Trivial File Transfer Protocol) server 96 which may also be located essentially anywhere, so long as it is accessible over a network, preferably the Internet.

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[0030] In step 108 the ISH 10 receives the configuration file from TFTP server 96 and parses the configuration file. The configuration file contains the name of a binary file. Binary file names consist of three parts. One part, usually a prefix, is a model ID which identifies the model, e.g. C100, of the ISH for which the file is intended. The end of the prefix is identified by the underscore symbol, i.e. "_". The second part is version name which has as the first letter a numeric digit, e.g. 1.23.45.67 or 5version2.0. This second part primarily identifies the release number of the binary files, but each release has different versions intended for

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different ISH models. The last part of the file name is a suffix identifying the file type, in this case ".bin" identifying the file as a binary file. Thus a complete binary file name may have the form C100_1.23.45.67.bin. It is important that the binary file be the appropriate one for the model of the ISH which downloads the file. To avoid downloading errors, the ISH renames the binary file. It replaces the model ID part of the binary file name with its own model ID. Thus with reference to the example file name above, if the ISH is a model C50, it deletes the prefix "C100" and replaces it with the prefix "C50". The ISH also checks to be sure that the suffix ".bin" is present at the end of the file name, and, if not, it adds the suffix.

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EXHIBIT B

Pages 12 and 13 of Application Serial No. 09/747,907

module 55 by connection 76. WAN controller 75 is preferably Globespan's G7000 multimode chip set, which further comprises an analog front end (AFE) chip (Globespan GS707X) and a multimode xDSL downloadable DSP and framer chip (Globespan GS707X). The AFE chip provides analog to digital and digital to analog signal conversions. The DSP and framer chip provides digital signal processing and signal transmission framing functions.

POTS interface 15, LAN interface 20, WAN interface 25, CPU 50, and ATM controller 55 are mounted on motherboard 80, which is a printed circuit board (also referred to as a logic board) that provides the various connections between ISH components as discussed above. The motherboard may include expansion slots to accept expansion cards such as an additional POTS card, an ATM-25 interface, a cable modem, etc. Motherboard 80 is connected to power supply 85 and battery pack 90, thereby providing power to the ISH components, the attached analog telephones, and the battery monitoring and charge circuitry. CPU 50 contains a power supply control module 83 connected to power supply 85 by connection 84. A preferred power supply is a universal-input (40-400Hz, 90-270V AC RMS) switch mode lead/acid battery float charger with a current-limited output of nominally 13.8 V, and provides charging current to battery pack 90 as represented by connection 86. A preferred battery is a 12 volt DC, 2.5A gel cell (lead-acid) battery, and preferably battery pack 90 comprises two such batteries housed within the ISH.

The power supply is plugged into a standard electrical outlet 87 and serves as the primary power source for the ISH. In the event of a power failure

to the electrical outlet, the ISH operates under backup power provided by its battery pack and basic telephone services remain available to the customer for emergency calls.

Each of the controllers illustrated as being part of the CPU 50 are actually software stored as configuration files in RAM and as binary code in flash memory 54. At the time of manufacture of the ISH, its final installation location and configuration are not known and therefore the required configuration files and binary code cannot be known. Instead, the ISH is manufactured with code to perform an automatic downloading of configuration files and binary code according to the steps illustrated in Figure 2.

At step 100 shown in Figure 2, the system sync function is triggered by the start up of the system. Start up means that the system is installed and has power turned on. Start up occurs upon initial installation of the system, but also occurs each time that power to the system is turned off, e.g. when power at outlet 87 is lost for sufficient time to deplete the backup power supply battery pack 90. In step 102, the system issues a DHCP, dynamic host control protocol, request to the CO 30. In response to this request, the CO DHCP server provides the IHS with a unique IP address to identify the ISH itself. The DHCP server also supplies the name of the appropriate configuration file, a list of domain names of configuration file servers where the configuration file is stored and a list of IP addresses for domain name servers which can provide IP addresses for the configuration file servers. In the preferred embodiment, the configuration file servers are standard TFTP, trivial file transfer protocol, servers.